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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/572,322

10/11/2006

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EXAMINER

DIAZ, THOMAS C

ART UNIT

PAPER NUMBER

3682

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,322	Applicant(s) BASTEIN ET AL.	
	Examiner THOMAS DIAZ	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, the part of the claim which recites "wherein pocketlike depressions that are spaced from each other in an axial direction run radially around the outer surface of the sliding bush and, in the mounted state of the vehicle steering column, are filled with plastic by injection molding through openings provided in the outer steering column element so as to form a fixed connection between the outer steering column element and the sliding bush with simultaneous closing of the openings," is written in a generally narrative form and it is unclear what is being positively recited in the claim and what is merely functional limitations or is reciting the process of installing the sliding bush. Examiner recommends writing the claims in accordance with 37 CFR 1.75(i) and please see MPEP 2113 for product by process claims.

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-11, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Burkhard et al.(USP 5722300) in view of Thomson (USP 3746415).

Regarding claim 5,

Burkhard et al. discloses a similar device comprising:

- an inner steering column element (fig.3, 28) which accommodates a steering spindle (fig.2,18) such that it can be displaced,
- an outer steering column element (fig.3, 30) which is arranged radially around the inner steering column element, and
- a sliding bush(fig.5, 56), which bears slidably against the inner steering column element and is connected captively to the outer steering column element, by which it is possible for the inner steering column element and the outer steering column element to be displaced with respect to one another,
- wherein the sliding bush bears slidably against the inner steering column element under a prestress (col.3, lines 3-40; the bush is prestressed during installation).

Burkhard et al. fails to disclose:

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- wherein pocketlike depressions that are spaced from each other in an axial direction run radially around the outer surface of the sliding bush and, [in the mounted state of the vehicle steering column, are filled with plastic by injection molding through openings provided in the outer steering column element so as to form a fixed connection between the outer steering column element and the sliding bush with simultaneous closing of the openings,]
- wherein each pocketlike depression is arranged on the outside at axial ends of the sliding bush,
- wherein the sliding bush has reinforcing ribs between the depressions, and

Thomson teaches a sliding bush (fig.1, 1) comprising:

- wherein pocketlike depressions (fig.1, 8) that are spaced from each other in an axial direction run radially around the outer surface of the sliding bush and, [in the mounted state of the vehicle steering column, are filled with plastic by injection molding through openings provided in the outer steering column element so as to form a fixed connection between the outer steering column element and the sliding bush with simultaneous closing of the openings,]
- wherein each pocketlike depression is arranged on the outside at axial ends of the sliding bush (fig.1, 8; there is a pocketlike depression at each end of the bush),

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- wherein the sliding bush has reinforcing ribs between the depressions (fig.1,7),

for the purpose providing a sliding bush with reduced noise and vibration characteristics (col.2, lines 1-3) and to provide a sliding bush having sufficient flexibility and resilience to permit the bearing surface thereof to conform to the surface of the rotation shaft about which it is mounted (col.2, lines 8-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the sliding bush disclosed by Burkhard et al. with the sliding bush taught by Thomson for the purpose providing a sliding bush with reduced noise and vibration characteristics (col.2, lines 1-3) and to provide a sliding bush having sufficient flexibility and resilience to permit the bearing surface thereof to conform to the surface of the rotation shaft about which it is mounted (col.2, lines 8-12).

Regarding claim 6, Thomson teaches:

wherein the sliding bush has a slot extending longitudinally (fig.10, 55;), for the purpose of permitting the sleeve to expand freely in a circumferential direction under operating conditions without cramping (col.7, lines 30-32) .

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sliding bush taught by Thomson to include the slot extending longitudinally for the purpose of permitting the sleeve to expand freely

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in a circumferential direction under operating conditions without cramping (col.7, lines 30-32).

Consequently by modifying the sliding bush (fig.1,1) with this slot the depressions would extend circumferentially toward both sides of the slot.

Regarding claims 7 and 9, Thomson discloses:

Wherein the sliding bush is manufactured from a plastic (col.5, line 50-51) having a low friction value (col.2, lines 1-3; reducing noise would read on the plastic having low friction value. Additionally col.1, lines 58-62 says it is capable of operating at higher speeds which implies less friction).

Regarding claims 8, 10, and 11, the combination of Thompson and Burkhard et al. disclose:

wherein the inner steering column element, the outer steering column element, and the sliding bush are of cylindrical or triangular configurations (the inner steering column element, the outer steering column element, and the sliding bush are cylindrical).

Conclusion

5. The objection to the specification is hereby withdrawn due to reasons stated by the applicant.

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6. Applicant's arguments with respect to claims 5-11 have been considered but are moot in view of the new ground(s) of rejection.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please note that Burkhard et al. teaches the process of injecting molding into the depressions of the bearing.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS DIAZ whose telephone number is (571)270-5461. The examiner can normally be reached on Monday-Friday 8:30am to 5:30pm, First Friday's off..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571)272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Thomas Diaz/
Examiner, Art Unit 3682

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3682